

EFFECT OF WEATHER ON CROPS AND FARMING
OPERATIONS, OCTOBER, 1924

By J. B. KINCER

River and station	Flood stage	Above flood stages—dates		Crest	
		From—	To—	Stage	Date
ATLANTIC DRAINAGE—continued					
Dan:	Feet			Feet	
Danville, Va.....	8	1	1	10.4	1
Clarksville, Va.....	12	2	3	12.5	2
Tar:					
Rocky Mount, N. C.....	9	(1)	5	15.0	1
Tarboro, N. C.....	18	1	9	32.3	4
Greenville, N. C.....	14	2	11	23.5	6
Fishing Creek:					
Enfield, N. C.....	15	(1)	3	17.3	1-2
Neuse:					
Neuse, N. C.....	15	(1)	5	20.7	2
Smithfield, N. C.....	14	(1)	7	24.0	1
Cape Fear:					
Fayetteville, N. C.....	35	(1)	4	49.6	2
Elisabethtown, N. C.....	22	(1)	7	33.8	3
Haw:					
Moncure, N. C.....	22	(1)	1	24.6	Sept. 30
Waccamaw:					
Conway, S. C.....	7	(1)	20	11.1	9-10
Peedee:					
Cheraw, S. C.....	27	1	4	34.7	2
Mars Bluff, S. C.....	17	1	11	21.9	6
Lynches:					
Effingham, S. C.....	14	6	6	14.4	6
Black:					
Kingstree, S. C.....	12	(1)	8	14.5	2
Santee:					
Rimini, S. C.....	12	(1)	13	20.3	4
Ferguson, S. C.....	12	(1)	18	15.2	6
Catawba:					
Catawba, S. C.....	12	(1)	1	18.3	1
Wateree:					
Camden, S. C.....	24	1	4	30.2	2
Congaree:					
Columbia, S. C.....	15	(1)	2	21.0	1
Broad:					
Blairs, S. C.....	15	(1)	2	24.0	1
Saluda:					
Pelzer, S. C.....	7	(1)	1	8.0	Sept. 30
Chappells, S. C.....	14	(1)	2	19.0	1
Oconee:					
Milledgeville, Ga.....	23	(1)	1	31.5	Sept. 26
Dublin, Ga.....	22	(1)	(2)	23.3	Sept. 30
		3	3	22.1	3
Ocmulgee:					
Macon, Ga.....	18	(1)	(2)	18.4	Sept. 30
Abbeville, Ga.....	11	1	9	12.4	6
MISSISSIPPI DRAINAGE					
Shenango:					
Sharon, Pa.....	9	(1)	2	9.4	1
Holston (North Fork):					
Mendota, Va.....	8	(1)	(2)	8.0	Sept. 30
PACIFIC DRAINAGE					
Willamette (Coast Fork):					
Saginaw, Ore.....	9	31	(4)		

- 1 Continued from last month.
 2 Below flood stage at 8 a. m., Oct. 1, 1924.
 3 Approximately.
 4 Continued at end of month.

MEAN LAKE LEVELS DURING OCTOBER, 1924

By UNITED STATES LAKE SURVEY

(Detroit, Mich., November 6, 1924)

The following data are reported in the "Notice to Mariners" of the above date:

Data	Lakes ¹			
	Superior	Michigan and Huron	Erie	Ontario
Mean level during October, 1924:	Feet	Feet	Feet	Feet
Above mean sea level at New York.....	601.89	579.18	571.70	245.45
Above or below—				
Mean stage of September, 1924.....	0.00	-0.33	-0.25	-0.20
Mean stage of October, 1923.....	-0.11	-0.20	+0.47	+0.80
Average stage for October last 10 years.....	-0.72	-1.18	-0.35	-0.20
Highest recorded October stage.....	-1.75	-3.86	-2.00	-2.36
Lowest recorded October stage.....	+0.31	-0.20	+0.90	+1.78
Average relation of the October level to—				
September level.....		-0.25	-0.3	-0.4
November level.....		+0.2	+0.25	+0.20

¹ Lake St. Clair's level: In October, 1924, 574.38 feet.

General summary.—Following the damaging frost which occurred in the Central-Northern States, including the upper Mississippi Valley, at the close of September, warm, sunshiny weather prevailed throughout the interior of the country, and was very favorable for maturing late crops and for farm work, especially for fall seeding. The unusually heavy rainfall during the first half of the month between the western upper Lake region and Rocky Mountains, while favorable in conditioning the soil for plowing and for fall-seeded grains, was somewhat unfavorable for farm work, especially for late threshing.

In much of the Atlantic coast area, where September was too wet for agricultural interests, the crop situation was markedly improved by the cessation of rainfall at the beginning of the month, and the period of dry, sunshiny weather which followed permitted rapid progress in field work, while late crops showed general improvement. It became too dry, however, in these sections the latter part of the month, though timely and beneficial showers occurred near the close. In central and west Gulf areas, where moisture had been deficient quite generally during much of the growing season, the persistent absence of material rainfall was unfavorable, and it was decidedly too dry for plowing and fall planting, while pastures were bare and stock water scarce.

In the Northwestern States farm work progressed under favorable weather conditions, with soil moisture mostly sufficient, though more rain was needed in the far Southwest. On the other hand, the agricultural outlook was greatly improved in central and northern Pacific coast districts by reason of better moisture conditions. In northern Plateau sections, light to moderate rains during the latter part of the month were very helpful, but in southern California it continued too dry.

Small grains.—During the first half of the month there was considerable interruption by rain to threshing in the Spring Wheat Belt, but elsewhere late threshing made good progress. Splendid weather prevailed for seeding winter wheat in the principal producing area, with the soil in good condition nearly everywhere, although in many parts of the Wheat Belt, more moisture was needed during the latter part of the month. It had also become too dry in the Southwest, where early seeded wheat made slow growth, and the late sown needed moisture for germination. Rains during the latter part of the month were very beneficial for this crop in the more northwestern States, especially in the eastern portions of Washington and Oregon, and in Idaho.

Corn.—Following the killing frost in the northwestern portion of the Corn Belt at the close of September, there was a reaction to much warmer weather, with very little rain and abundant sunshine, which conditions prevailed during most of October. The corn crop in the greater part of the large producing areas matured slowly and was very late in ripening and, while the frosted corn dried out well during the month, there was much complaint of chaffy ears and light yields. In most of the central valley States the first killing frost of the season was delayed until about the 25th of October, which permitted much corn to mature that would have been damaged if frost had occurred as early as in an average year.

Cotton.—The month in general was very favorable for the cotton crop. There was no frost of consequence in any part of the belt until the latter part of October, when the northern part had heavy to killing frost quite generally. The leaves of plants were rather widely killed at that time where the frost occurred, but there was no material damage to the crop, while in many places the frost was rather beneficial than harmful, inasmuch as it promoted rapid opening of bolls. Throughout the belt, practically the entire month had unusually favorable weather for picking and ginning, and nearly uninterrupted progress in this work was reported, with harvest well along at the close. In Georgia only scattered fields remained unpicked, and picking was nearly completed in Alabama, Mississippi, and Louisiana, as well as in eastern and southern Texas.

Miscellaneous.—Pastures and meadows in Central and Northern States continued in generally good condi-

tion until the latter part of the month, when dry weather was detrimental. Pastures in most of the Gulf area were badly dried and stock water scarce by reason of the long drought, but there was sufficient moisture in much of the great western grazing sections to be of material benefit. Potato harvest in Northern States made good progress, with the weather especially favorable for this work in the Northeast; reports of yields were generally satisfactory. There was considerable damage to truck crops in Florida by a tropical storm about the 20th of the month, but otherwise conditions were generally favorable for truck and minor crops in the Atlantic coast section. In other portions of the South it was too dry. Sugar cane in Louisiana was very poor and harvesting was delayed. The harvest of sugar beets progressed under generally favorable conditions, though in parts of Utah the soil was too dry.

CLIMATOLOGICAL TABLES

CONDENSED CLIMATOLOGICAL SUMMARY

In the following table are given for the various sections of the climatological service of the Weather Bureau the monthly average temperature and total rainfall; the stations reporting the highest and lowest temperatures, with dates of occurrence; the stations reporting the greatest and least total precipitation; and other data as indicated by the several headings.

The mean temperature for each section, the highest and lowest temperatures, the average precipitation, and the greatest and least monthly amounts are found by using all trustworthy records available.

The mean departures from normal temperatures and precipitation are based only on records from stations that have 10 or more years of observations. Of course, the number of such records is smaller than the total number of stations.

Condensed climatological summary of temperature and precipitation by sections, October, 1924

Section	Temperature						Precipitation					
	Section average	Departure from the normal.	Monthly extremes				Section average	Departure from the normal.	Greatest monthly		Least monthly	
			Station	Highest.	Date	Station	Lowest	Date	Station	Amount	Station	Amount
Alabama.....	65.1	-0.1	Selma.....	93	14	Saint Bernard.....	26	24	Healing Springs.....	1.90	21 stations.....	In. u. 00
Arizona.....	61.1	-0.7	Maricopa.....	109	1	5 stations.....	14	10	2 stations.....	2.35	19 stations.....	0.00
Arkansas.....	64.9	+2.6	Searcy.....	96	12	Dutton.....	21	25	Eureka Springs.....	2.13	2 stations.....	0.00
California.....	57.6	-3.2	2 stations.....	104	1	2 stations.....	10	11	Crescent City.....	17.86	8 stations.....	0.00
Colorado.....	47.6	+1.2	Lamar.....	95	1	Crested Butte.....	-2	30	Dillon.....	4.98	Buena Vista.....	0.04
Florida.....	71.7	-1.7	Fort Lauderdale.....	84	4	De Funiak Springs.....	37	24	New Smyrna.....	39.08	Bluff Springs.....	8.25
Georgia.....	63.2	-1.6	Eatonton.....	90	19	Blue Ridge.....	22	24	Saint George.....	4.45	Tallapoosa.....	0.29
Hawaii.....	73.3	-0.4	Waiaue.....	91	3	Waimea.....	51	24	Eke.....	36.00	Puuloa.....	0.00
Idaho.....	46.9	+0.5	2 stations.....	85	15	Idaho City.....	11	30	Atlanta.....	5.34	Idaho Falls.....	0.47
Illinois.....	60.2	+5.0	Harrisburg.....	92	10	2 stations.....	21	23	Clinton.....	3.39	Anna.....	T.
Indiana.....	59.4	-4.8	2 stations.....	90	9	3 stations.....	20	23	South Bend.....	1.47	Vevay.....	0.00
Iowa.....	58.1	-6.2	Audubon.....	89	11	Fayette.....	21	22	Mount Pleasant.....	2.58	Rockwell City.....	0.03
Kansas.....	60.9	-3.8	Oawker City.....	100	1	3 stations.....	19	31	Arkansas City.....	3.28	Republic.....	0.25
Kentucky.....	61.2	-3.1	2 stations.....	91	5	2 stations.....	24	23	Calhoun.....	1.39	4 stations.....	0.00
Louisiana.....	68.8	-0.9	Calhoun.....	98	5	Kelly (near).....	27	26	Delta Farms.....	2.07	21 stations.....	0.00
Maryland-Delaware.....	56.0	-0.4	Western Port, Md.....	88	11	2 stations.....	15	23	Cambridge, Md.....	1.78	2 stations.....	T.
Michigan.....	53.0	+4.1	Paw Paw.....	86	10	Vanderbilt (near).....	12	22	Eagle Harbor.....	2.73	Onaway (near).....	0.06
Minnesota.....	53.0	+7.1	Beardsley.....	87	24	Red Lake.....	19	21	Itasca State Park.....	4.66	Bird Island.....	0.02
Mississippi.....	66.7	-1.7	3 stations.....	94	4	Yazoo City.....	27	24	Walnut Grove.....	2.00	13 stations.....	0.00
Missouri.....	61.8	-4.4	2 stations.....	92	8	Hollister.....	21	28	Stover.....	4.17	3 stations.....	0.00
Montana.....	46.6	+2.5	Valentine.....	90	1	Wheaton.....	6	11	Heron.....	3.58	2 stations.....	0.16
Nebraska.....	56.7	+5.6	Franklin.....	97	1	Harrison.....	21	31	Haigler.....	2.90	Auburn.....	0.11
Nevada.....	50.5	-0.4	Beatty.....	98	2	Millett.....	10	12	Owyhee.....	2.96	5 stations.....	0.00
New England.....	49.6	+0.7	Turner's Falls, Mass.....	85	11	2 stations.....	10	30	Somerset, Vt.....	2.09	Turner's Falls, Mass.....	0.00
New Jersey.....	54.4	-0.4	Indian Mills.....	84	6	Runyon.....	16	23	Little Falls.....	2.76	Phillipsburg.....	0.04
New Mexico.....	54.8	+1.3	Jal.....	95	13	3 stations.....	8	13	Fort Sumner.....	2.90	7 stations.....	0.00
New York.....	50.0	-0.5	Jamestown.....	86	5	Gabriels.....	13	23	Hoffmeister.....	2.71	2 stations.....	0.00
North Carolina.....	58.6	-1.5	Lumberton.....	89	18	Parker.....	15	22	Southport.....	3.38	Bryson City.....	0.11
North Dakota.....	50.3	+6.5	West Hope.....	86	11	Jamestown.....	19	3	Powers Lake.....	5.74	Washburn.....	0.97
Ohio.....	56.1	+2.2	Portsmouth.....	90	19	3 stations.....	20	23	Norwalk.....	0.99	6 stations.....	0.00
Oklahoma.....	64.8	+3.3	Arapahoe.....	98	4	Hooker.....	22	31	Cheyenne.....	4.26	5 stations.....	0.00
Oregon.....	49.4	-0.4	Grants Pass.....	87	1	Fremont.....	3	11	Willow Creek.....	19.31	Blitzen.....	0.32
Pennsylvania.....	52.9	+0.6	Indiana.....	87	9	Bradys Bend.....	14	23	Hawley.....	2.30	6 stations.....	0.00
Porto Rico.....	78.3	-0.1	Dorado.....	98	22	Toro Negro.....	55	20	Utusado.....	15.45	2 stations.....	1.41
South Carolina.....	62.2	-1.3	3 stations.....	89	7	Santuck.....	28	24	Darlington.....	3.20	Calhoun Falls.....	0.56
South Dakota.....	54.6	+6.5	Tyndall.....	93	1	2 stations.....	20	26	Vale.....	5.33	Hardy Ranger Sta- tion.....	0.34
Tennessee.....	61.4	+1.6	Perryville.....	93	6	2 stations.....	21	23	Greeneville.....	1.38	9 stations.....	T.
Texas.....	68.6	+1.1	2 stations.....	101	3	Romero.....	22	31	Brownsville.....	5.12	35 stations.....	0.00
Utah.....	47.5	-1.2	Saint George.....	91	1	Loa.....	4	29	Silver Lake.....	3.35	Escalanti.....	0.00
Virginia.....	56.8	-0.9	Leeds Manor.....	88	8	Burkes Garden.....	14	22	Urbanas.....	3.48	Hot Springs.....	0.05
Washington.....	50.0	+0.3	Wapato.....	84	17	Snyders Ranch.....	16	10	Forks.....	23.78	Ellensburg.....	0.15
West Virginia.....	54.6	-0.2	3 stations.....	87	6	Cheat Bridge.....	14	23	Harpers Ferry.....	1.28	Morgantown.....	0.07
Wisconsin.....	53.7	+5.5	Richland Center.....	84	19	Minoqua.....	12	22	Cornucopia.....	2.56	2 stations.....	T.
Wyoming.....	45.6	+2.1	2 stations.....	83	1	Dixon.....	6	10	Moran.....	5.20	Deaver.....	0.14

¹ For description of tables and charts, see REVIEW, January, 1924, pp 56-57.

² Other dates also.